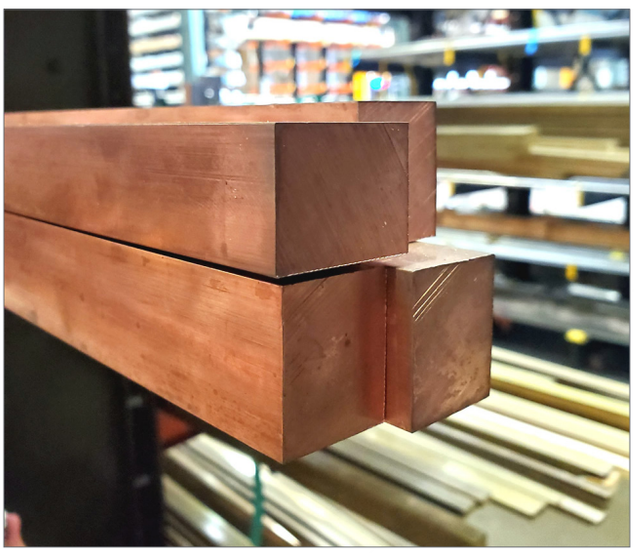
THAMES
STOCKHOLDERS

C101 (CW004A)

COPPER ALLOY



Product Overview

With high thermal conductivity, **C101 (CW004A)** is a popular choice for all types of electrical components and conductors and finds use in a wide range of engineering applications.

C101 is a highly versatile material that we typically supply as HDHC (hard drawn, high conductivity) and offers high ductility and impact strength. It is a popular alloy for various electrical conductors and components. C101 (CW004A) is 99.9% pure and forms the basis of many brasses and bronzes.

Availability:

- Round bar, flat bar, square bar & sheet

Key Features

- Excellent for soldering
- Versatile - widespread uses
- High ductility and material strength
- Corrosion resistance is good to excellent

Applications

- Connectors, transformers,
- General electronics
- Motor components, busbars, cable strips
- Heatsinks, building fascias

Mechanical Properties

Tensile properties as per R250 (10 - 30mm):	
Tensile Strength (MPa)	250 min
Proof Stress 0.2% (MPa)	180 min
Elongation A5 (%)	15 min
Hardness as per H065:	
Brinell (HBW)	65 - 90
Vickers (HV)	70 - 95

* Properties as per BS EN 13601

Chemical Composition (weight, %)

	Cu	Bi	O	Pb	Others
Min.	Bal				
Max.	Bal	0.0005	0.040	0.005	0.03

* Properties as per BS EN 13601

Physical Properties

Density	8.92 g/cm^3
Melting Point	1083° C
Modulus of Elasticity	117 GPa
Electrical Resistivity	0.0171x10^{-6} Ω.m
Thermal Conductivity	391.1 W/m.K
Thermal Expansion	16.9 x10 $^{-6}$/K

Material Specifications:

- BS EN 13601
- BS1433
- C101
- C11000 ETP
- CW004A
- Cu-ETP
- DIN 2.0060

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